

# Exicom VED215-100

## Outdoor Cabinet Energy Storage System



# 1. Product Introduction

## 1.1. Model Description



Figure 1.1 Model identification

## 1.2. Product Function

The VED215-100 outdoor energy storage cabinet integrates energy storage batteries, modular PCS, energy management monitoring system, power distribution system, environmental control system, and fire control system. It adopts modular PCS for easy maintenance and expansion. The outdoor cabinet adopts front maintenance to reduce the occupied area and maintenance channel. It has the characteristics of safe and reliable operation, fast deployment, low-cost, high-energy efficiency, and intelligent management.

The operating strategy of the energy storage system in common application scenarios is as follows:

### Peak shaving and valley filling :

- When the time-of-use tariff is at its valley segment: The energy storage cabinet automatically charges and then remains idle after full charging; When the time-of-use tariff is at its peak segment: The energy storage cabinet automatically discharges, realizing the arbitrage of price difference and improving the economic efficiency of the photovoltaic-energy storage-charging system.

### Photovoltaic-energy storage integration :

- Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage; When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.

### 1.3. Electrical Wiring Diagram

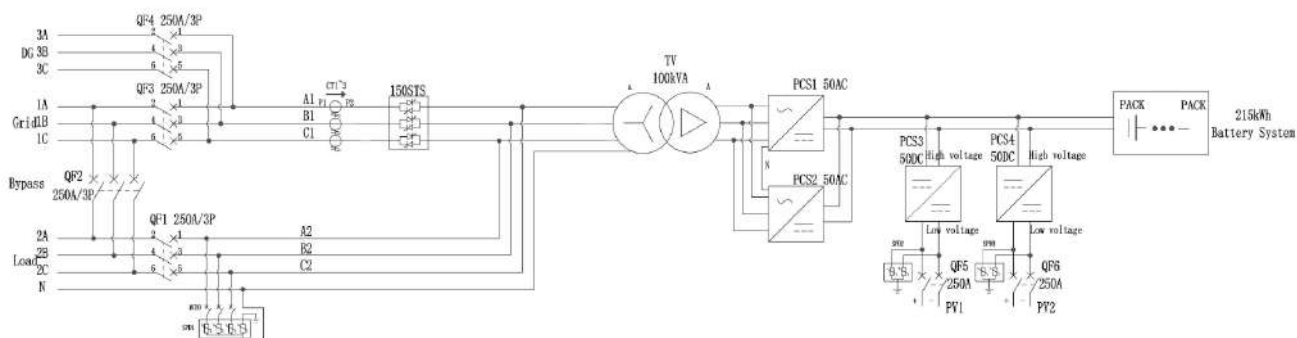


Figure 1.3 VED215-100 (215kWh, 100kW) Electrical Wiring Diagram

#### Description:

The system scheme with on-grid and off-grid capabilities, isolated transformer, and photovoltaic input has different wiring configurations for different projects, and the actual wiring may vary slightly. Actual wiring should be based on the drawings provided with the product shipment.

### 1.4. Product Features

- The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.
- Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage; When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.
- The protection level is IP55, which can perfectly cope with various types of weather in the outdoor environment.
- It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.
- The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

## 1.5. Product Parameters

The following are typical configuration parameters of the outdoor cabinet-type photovoltaic-energy storage system. Actual delivery shall be subject to the technical agreement.

**Table 1.5 VED215-100 Parameter Sheet**

Battery Parameters	
Battery rated capacity	215kWh
Battery rated voltage	768V
Battery voltage range	672V~864V
Battery type	LFP
Battery cell capacity	1P * 20S * 12S
Cell Capacity	280Ah
Max. charge/discharge power	0.5P
Max. charge/discharge current	184A
Photovoltaic Parameters	
Rated power	100kW
PV Voltage Range	250V~500V (MPPT)
PV Max. Current	160A*2
MPPT quantity	2
AC Parameters	
Rated AC power	100kW
Rated AC current	144A
Rated AC voltage	400V, 3W+N+PE
Rated AC frequency	50/60Hz
THDi	<3 (Rated power)
Power Factor	-1 leading to +1 lagging
THDv	<3% (linear load)
General Parameters	
Protection level	IP55
Protection level	I
Isolation mode	Isolation transformer
Shutdown self-discharge	< 100W (Without transformer)
Display	LCD
Relative humidity	0~95% (No condensation)
Noise	< 78dB
Ambient temperature	-25°C to +60°C (Derating above 45°C)
Cooling mode	Intelligent air-cooled
Altitude	3000m (>2000m derating)
Communication interface	CAN/Ethernet/RS485
Dimension (WDH)	1800 * 1200 * 2300mm
Weight (approx.)	3260kg

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## 1.6. Human-Machine Interface Introduction

The home page interface displays real-time power, voltage, current, generated energy, operation mode, working status and other information of the system.



## 1.7. Appearance

